

### **Description**

**HF700SA** is a polypropylene homopolymer intended for injection moulding.

This material has excellent balanced mechanical properties and is easy to process.

# **Applications**

HF700SA has been developed especially for applications like:

Household applications

### **Special features**

High heat stabilised UL registered under File E108112

Shows excellent antistatic performance Excellent flowability

## **Physical Properties**

Property	Typical Value Data should not be used for s	Test Method pecification work	
Density	905 kg/m3	ISO 1183	
Bulk density	500 - 600 kg/m3		
Melt Flow Rate (230 °C/2,16 kg)	21 g/10min	ISO 1133	
Tensile Modulus (1 mm/min)	1.500 MPa	ISO 527-2	
Tensile Strain at Yield (50 mm/min)	8 %	ISO 527-2	
Tensile Stress at Yield (50 mm/min)	34 MPa	ISO 527-2	
Heat Deflection Temperature A (1,80 MPa)	53 °C	ISO 75-2	
Heat Deflection Temperature B (0,45 MPa)	94 °C	ISO 75-2	
Vicat softening temperature (10 N)	153 °C	ISO 306	
Vicat softening temperature (50 N)	90 °C	ISO 306	
Charpy Impact Strength, notched (23 °C)	3,5 kJ/m <sup>2</sup>	ISO 179/1eA	
Charpy Impact Strength, unnotched (23 °C)	80 kJ/m²	ISO 179/1eU	
Charpy Impact Strength, unnotched (-20 °C)	15 kJ/m²	ISO 179/1eU	
Hardness, Ball Indentation 358 N/30 s	70 MPa	ISO 2039	
Hardness, Rockwell (R-scale)	102	ISO 2039-2	

Values determined on standard injection moulded specimens conditioned at 23°C and 50% relative humidity after at least 96 hours storage time.





## **Application Related Tests**

Property	Typical Value Data should not be used fo	Test Method r specification work	
Flammability at thickness 0,8 - 3 mm	НВ	UL 94	
Ball Pressure test at thickness 2 mm	125 °C	EN 60695-10-2	
Relative Temperature Index at (Thickness)			
Electric	120 °C	UL 746B	
Mechanical with impact	120 °C	UL 746B	
Mechanical without impact	120 °C	UL 746B	
Gloss on 2 mm plaque 1	70 %	DIN 67530	
Mould average Shrinkage <sup>2</sup>	1,5 %	Borealis Method	

<sup>&</sup>lt;sup>1</sup> at 20 degree (of arc)

## **Processing Techniques**

The actual conditions will depend on the type of equipment used.

#### **Injection Moulding**

This product is easy to process with standard injection moulding machines. Following parameters should be used as guidelines:

Feeding temperature	40 - 80 °C
Mass temperature	220 - 260 °C
Back pressure	Low to medium
Holding pressure	30 - 60 MPa
Mould temperature	30 - 50 °C
Screw speed	Low to medium
Flow front speed	100 - 200 mm/s

### **Storage**

**HF700SA** should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odour generation and colour changes and can have negative effects on the physical properties of this product.

#### Safety

The product is not classified as a dangerous preparation.

Please see our Safety Data Sheet for details on various aspects of safety of the product, for more information contact your Borealis representative.



 $<sup>^2</sup>$  VALUES MAY ONLY BE USED AS INDICATION, AND SHOULD NOT BE USED DIRECTLY IN MOULD DESIGN WITHOUT PRIOR VALIDATION



#### Recycling

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

Please see our Safety Data Sheet for details on various aspects of recovery and disposal of the product.

#### **Disclaimer**

The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications.

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication, however we do not assume any liability whatsoever for the accuracy and completeness of such information.

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